Item 10. (April 30, 2004)
Errata Sheets for Model Water Quality Management Plan (WQMP) Guidance for San Bernardino County required by Order No. R8-2002-0012 NPDES No. CAS618036

Item No.	Location	Changes (strikeout/underline)
1	Section 1 Page E-1	Footer, ~~December 2003~~ April 2004 and Page ~~E-1~~ 1-1
2	Section 1-4, Page 1-3, last bullet	The combination of Site Design, Source Control and/or Treatment Control BMPs or Regional-based treatment program must ~~adequately~~ address all identified pollutants and hydrologic conditions of concern (OC 2003).
3	Section 2	Insert page number: 2-1
4	Section 2.3, Page 2-5, Item 2.B	The project does not create a HCOC if runoff rates, volumes, velocities, and flow duration for the post-development condition do not exceed those of the pre-development condition for 1-year ~~and~~ , 2-year, and 5 year frequency storm events.
5	Section 2.5.3 Treatment Control BMPs Page 2-20	~~[1] Sidewalk widths must still comply with Americans with Disabilities Act regulations and other life safety requirements.~~ ~~[1] However, street widths must still comply with life safety requirements for fire and emergency vehicle access.~~ ~~[1]However, projects must still comply with hillside grading ordinances that limit or restrict infiltration of runoff. Infiltration areas may be subject to regulation as Class V injection wells and may require a report to the USEPA. Consult the Agency for more information on use of this type of facility.~~
6	Section 2.5.3 Page 2-24	At a minimum, use of structural Treatment Control BMPs that are designed to primarily function as infiltration devices shall meet the following ~~condition~~[9] conditions". Change the footnote No. ~~8~~ to 6.
7	Section 2.5.3.1 Page 2-29	**Calculate the composite runoff coefficient "C-Factor**" for the BMP Drainage Area. Obtain individual C-Factors from the local agency or from the local flood control district: if C-Factors are not available locally, obtain factors from hydrology text books or estimate using Table ~~B-3~~ B-2 in Attachment B. Composite the individual C-Factors using area-weighted averages.
8	Section 2.5.3.2 Page 2-30	**Calculate the composite runoff coefficient "C-Factor"** for the BMP Drainage Area. Obtain individual C-Factors from the local agency or from the local flood control district: if C-Factors are not available locally, obtain factors from hydrology text books or estimate using Table ~~B-3~~ B-2 in Attachment B. Composite the individual C-Factors using area-weighted averages.
9	Section 3 Page 2-34	Footer ~~December 2003~~ April 2004 and page ~~2-34~~ 3-1
10	Section 3 Page 3-35	Footer ~~March 2004~~ April 2004 and Page No. ~~3-35~~ 3-2
11	Section 3 Page3-36	Footer ~~March 2004~~ April 2004 and Page ~~3-36~~ 3-3
12	Section 4 Page	Footer ~~March 2004~~ to April 2004
13	Attachment A Page A-3	Erosive ~~Soil~~ Site Conditions

14	Attachment A. Section 2.1 Page A-5	**2.1 POLLUTANTS OF CONCERN (Not required for Non-Category projects)** ~~List all expected pollutants of concern for the project site.~~ Use Table 2-1 in the WQMP Guidance to identify the potential pollutants expected to be generated by the development. ~~Use Table B-1 in the WQMP Guidance to identify any pollutants that contribute to waterbody impairments on the 303(d) list.~~ List ~~any other~~ all expected pollutants of concern ~~from~~ for the project site as directed below: ~~not listed in Tables 2-1 and B-1.~~ ▪ List all expected and potential pollutants using Table 2-1. ▪ List any other pollutants of concern from the project site not listed in Tables 2-1 and B-1. ▪ Identify pollutants of concern in the receiving waters as follows: 1 For each of the proposed project discharge points, identify the proximate receiving water for each point of discharge and all downstream receiving waters, using hydrologic unit basin numbers as identified in the most recent version of the Water Quality Control Plan for the Santa Ana Basin prepared by the RWQCB. 2 Identify each proximate and downstream receiving water identified above that is listed on the most recent list of Clean Water Act Section 303(d) (CWA 303(d) list) impaired water bodies (Attachment B, Table B-1). List any and all pollutants for which the receiving waters are impaired. 3 Compare the list of pollutants for which the receiving waters are impaired with the pollutants expected to be generated by the project (and listed above). 4 List all pollutants that are expected or potential from the project site, and for which the receiving waters are impaired. 5 Summarize identified pollutants of concern by checking the applicable boxes in the following table. (For identified pollutants of concern that are causing impairment in receiving waters, the project WQMP shall incorporate one or more Treatment Control BMPs of medium or high effectiveness in reducing those pollutants.)

Pollutant of Concern Summary Table

Pollutant Type	Expected	Potential	Listed for Receiving Water
Bacteria/Virus			
Heavy Metals			
Nutrients			
Pesticides			

		Organic Compounds			
		Sediments			
		Trash & Debris			
		Oxygen Demanding Substances			
		Oil & Grease			
		Other--specify pollutant(s):			

15 — Attachment A. Section 2.2

2.2 HYDROLOGIC CONDITIONS OF CONCERN (Not required for Non-Category projects)

Replace Section 2.2 with the following:

All Category projects must identify any hydrologic condition of concern (HCOC) that will be caused by the project, and implement Site Design, Source Control, and/or Treatment Control BMPs to address identified impacts. Project proponents must follow the procedure for identifying HCOCs specified in Section 2.3 of the Model WQMP. Use the following Table and instructions as a guide.

1. (from Section 2.3, Part 2)**:** Determine if the project will create a Hydrologic Condition of Concern. Check "yes" or "no" as applicable and proceed to the appropriate section as outlined below.	**YES**	**NO**
A. All downstream conveyance channels, that will receive runoff from the project, are engineered, hardened (concrete, riprap or other), and regularly maintained to ensure design flow capacity, and no sensitive stream habitat areas will be affected. Engineered, hardened, and maintained channels include channel reaches that have been fully and properly approved (including CEQA review, and permitting by USACOE, RWQCB and California Dept. of Fish & Game) by June 1, 2004 for construction and hardening to achieve design capacity, whether construction of the channels is complete. Discharge from the project will be in full compliance with Agency requirements for connections and discharges to the MS4, including both quality and quantity requirements, and the project will be permitted by the Agency for the connection or discharge to the MS4.		
B. Project runoff rates, volumes, velocities, and flow duration for the post-development condition will not exceed those of the pre-development condition for 1-year , 2-year, and 5 year frequency storm events. This condition will be substantiated with hydrologic modeling methods that are acceptable to the Agency, to the U.S. Army Corps of Engineers (USACOE), and to local watershed authorities.		
C. Can the conditions in part a or b above be demonstrated for the project?		

- If the answer for A, B, and/or C above is yes, then the project does not create a HCOC—in this case go to Section 3.
- If the answer for C above is no, the go to section 2.3. Part 3, below.

2. (from Section 2.3, Part 3)**:** The WQMP for projects that create a HCOC must include an evaluation of whether the project will adversely impact downstream erosion, sedimentation or stream habitat. The Agency may require that the evaluation be conducted by a registered civil engineer in the

Does the evaluation include:	YES	NO
A. An evaluation of potential impacts to all downstream channel reaches.		
B. Consideration of the hydrology of the entire watershed. Review all applicable drainage area master plans to the extent available, to identify BMP requirements for new development that address cumulative inputs from development in the watershed.		

State of California, with experience in fluvial geomorphology. Perform the required evaluation as specified in A – F below. Check the boxes "yes" or "no" to verify a complete report and proceed to appropriate section based on results.

- Is the report required by 2.3, Part 3.f complete? (Attach the report) If not, perform the required evaluation and add to the report.
- Does the report determine that the project will have an adverse downstream impact**?**
- If yes, then go to Section 2.3, Part 4, below.
- If no, then go to Section 3.

3. (from Section 2.3, Part 4)**:** If the evaluation specified in (3) above, determines that adverse impacts to downstream erosion, sedimentation or stream habitat will occur, then the project proponent must perform the requirements specified in A, B, and C, below. Check the boxes "yes" or "no" to verify all requirements have been completed.	YES	NO
A. Conduct hydrologic modeling of the project and the potentially impacted areas, according to modeling standards recommended by the Agency or local watershed authority, for the 1-year, 2-year, and 5-year frequency storm events, at a minimum. Hydrologic modeling results must include determination of peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume for the project area.		

		impacted areas, according to modeling standards recommended by the Agency or local watershed authority, for the 1-year, 2-year, and 5-year frequency storm events, at a minimum. Hydrologic modeling results must include determination of peak flow rate, flow velocity, runoff volume, time of concentration, and retention volume for the project area.		
		B. Ensure that the project will be consistent with any approved master plans of drainage or analogous plans or programs.		
		C. Implement Site Design BMPs as specified in Section 2.5.1, and recommend any additional BMPs that will be implemented to mitigate the adverse impacts identified in (3.F) above.		

- Are the requirements for Section 2.3 Part 4 adequate? (Attach report/results)
- Has the project proponent recommended BMPs to mitigate any impacts based on the modeling?
- If yes, then list/describe BMPs:
- If no, then explain how mitigation will be achieved:
- Will the BMPs be effective?
- Does the Agency have any additional requirements?
- Verify with Agency before submitting the project WQMP.

2.3 WATERSHED IMPACT OF PROJECT

The project proponent must include in the project WQMP:

- An evaluation of the pollutants of concern and/or hydrologic conditions of concern associated with the project, and a determination of whether the project will cause any significant impact(s) to any downstream receiving waters, alone or in conjunction with other projects in the watershed.

- A description of how any adverse impacts will effectively be mitigated through the incorporation and implementation of BMPs.

16	Attachment A. Section 3	**SECTION 3** **BEST MANAGEMENT PRACTICE SELECTION PROCESS** **3.1 SITE DESIGN BMPS** For listed Site Design BMPs, indicate in the following table whether it will be used (yes/no) and describe how used, or, if not used, provide justification/alternative. Provide detailed descriptions of planned Site Design BMPs, if applicable. Modify throughout Section 3.1: "~~Describe action taken~~ Describe action taken or justification/alternative:
17	Attachment A. Section 3.2	**3.2 SOURCE CONTROL BMPS** . Complete the following selection table for Source Control BMPs, by checking boxes that are applicable. All listed BMPs shall be implemented for the project. Where a required Source

		Control BMP is not applicable to the project due to project characteristics, justification and/or alternative practices for preventing pollutants must be provided. In addition to completing the following tables, ~~P~~provide detailed descriptions on the implementation of planned Source Control BMPs.
	Section 3.2	Add the following table after page A-14

Justification for Source Control BMPs		
Source Control BMP	**Used in Project (yes/no)?**	**Justification/Alternative***
Education of Property Owners		
Activity Restrictions		
Spill Contingency Plan		
Employee Training/Education Program		
Street Sweeping Private Street and Parking Lots		
Common Areas Catch Basin Inspection		
Landscape Planning (SD-10)		
Hillside Landscaping		
Roof Runoff Controls (SD-11)		
Efficient Irrigation (SD-12)		
Protect Slopes and Channels		
Storm Drain Signage (SD-13)		
Inlet Trash Racks		
Energy Dissipaters		

Item No.	Location	Changes (strikeout/underline)
18	Attachment A. Section 3.3	**3.3 TREATMENT CONTROL BMPS (Not required for Non-Category projects)** ▪ Complete the following ~~selection table for~~ Treatment Control BMPs~~s~~ Selection Matrix. For each pollutant of concern enter "yes" if identified in Section 2.1, above, or "no" if not identified for the project. Check the boxes of selected BMPs that will be implemented for the project to address each pollutant of concern from the project as listed above in section 2.1. Treatment Control BMPs must be selected and installed with respect to identified pollutant characteristics and concentrations that will be discharged from the site. For any identified pollutants of concern not listed in the Treatment Control BMP Selection Matrix, provide an explanation of how they will be addressed by Treatment Control BMPs. For identified pollutants of concern that are causing an impairment in receiving waters (as identified in Section 2.1, above), the project WQMP shall incorporate one or more Treatment Control BMPs of medium or high effectiveness in reducing those pollutants. It is the responsibility of the project proponent to demonstrate, and document in the project WQMP, that all pollutants of concern will be fully addressed. The Agency may require information beyond the minimum requirements of this WQMP to demonstrate that adequate pollutant treatment is being accomplished. ▪ In addition to completing the Selection Matrix, ~~P~~provide detailed descriptions on the location, implementation, installation, and long-term O&M of planned Treatment Control BMPs.
19	Attachment A. Section 3.4.1	**FLOW BASED DESIGN CRITERIA** ▪ Calculate the BMP design flow by using the approach presented in the WQMP Guidance (Section 2.5.2.1). Show calculations in detail—attach a separate sheet of calculations.
20	Attachment A. Section 3.4.2	**VOLUME BASED DESIGN CRITERIA** Calculate the required capture volume of the BMP using the approach presented in the WQMP Guidance (Section 2.5.2.2). Show calculations in detail—attach a separate sheet of calculations
21	Attachment A. Section 4.1.1	**O&M description and Schedule that must:**
22	Attachment A. Section 4.1.2	**Inspection and Monitoring requirements that must:**
23	Attachment A. Section 4.1.3	**Identification of Responsible Parties that must:**
24	Attachment A. Section 5.1	**Funding** The Permit requires that for all Treatment Control BMPs, a funding source or sources for operation and maintenance of each BMP be identified within the WQMP. Project proponents must:
25	Attachment A	Change page numbers as needed.

California Regional Water Quality Control Board
Santa Ana Region

April 30, 2004

ITEM: 10

SUBJECT: San Bernardino County Municipal Storm Water Permittees' Model Water Quality Management Plan Guidance (WQMP)

DISCUSSION:

On April 26, 2002, the Santa Ana Regional Water Quality Control Board (Board) adopted Order No. R8-2002-0012, NPDES No. CAS618036, Areawide Urban Storm Water Runoff Permit for San Bernardino County and the incorporated cities (SBC MS4 Permit). The SBC MS4 Permit regulates the discharge of storm water from municipal separate storm sewer systems (MS4) to waters of the U. S. This Board and other Southern California Regional Boards have adopted a number of similar MS4 permits. Provision XII.B of the MS4 permit requires permittees to develop and implement structural Best Management Practices (BMPs), sized according to the sizing criteria specified in the Permit, or other equivalent control measures to reduce/eliminate the discharge of pollutants from new developments and significant re-developments.

The 1996 MS4 Permit for Los Angeles County, adopted by the Los Angeles Regional Board, required the County to submit Standard Urban Storm Water Mitigation Plans (SUSMPs). The SUSMPs are plans that designate BMPs that must be used in specified categories of development projects. The County submitted SUSMPs, but the Regional Board approved the SUSMPs only after making revisions. The Executive Officer issued the revised SUSMPs on March 8, 2000 and upon appeal, the action was upheld in a precedential decision by the State Board in Order WQ-2000-11, on October 5, 2000.

With that precedential decision, the State Board required that the SUSMP requirement, or its equivalent, be included in all future Phase I MS4 permits. During the second permit term for the SBC MS4 permit (1996-01), the permittees developed model Guidelines for New Development and Redevelopment Projects. These Guidelines included structural and non-structural BMPs. When the San Bernardino County MS4 permittees initiated the renewal of the SBC MS4 Permit in September 2000, they stated their desire to require project proponents to submit a WQMP. Additionally, the permittees wanted to be able to make use of 'regional' or 'watershed' based treatment BMPs, to reduce the need for site-by-site or tract-by-tract treatment BMPs. The SBC MS4 permit included requirements consistent with the State Board decision and recognized the progress made by the SBC MS4 permittees including the need for a WQMP and the ability to make use of regional treatment BMPs.

The MS4 permit required that the permittees review their existing BMPs for new developments and submit by January 1, 2004 a revised Water Quality Management Plan (WQMP) to address urban runoff from new and significant redevelopment projects.

On December 30, 2003, the permittees submitted the December 2003 version of the WQMP. The submittal included a summary of the comments they received and their responses to an earlier preliminary draft of the WQMP.

On January 9, 2004 staff notified interested parties by electronic mail of the availability of the document and provided a link to the WQMP and other related documents. On February 17, 2004, staff provided comments to the County, the Principal Permittee. Other interested parties have also provided comments on the December 2003 WQMP.

SBC MS4 Permit states that by June 1, 2004, the submitted WQMP must be approved by the Executive Officer as providing an equivalent or superior degree of treatment as structural treatment BMPs at each new development and significant redevelopment or those sized, structural treatment BMPs will be required. The process that must be followed for the approval of submittals under the SBC MS4 Permit is identified in Section XVIII.1 (Provisions). "All reports submitted by the permittees as per the requirements in this Order for the approval of the Executive Officer shall be publicly noticed and made available on the Regional Board's website, or through other means, for public review and comments. The Executive Officer shall consider all comments received prior to approval of the reports. Any unresolved significant issues shall be scheduled for a public hearing at a Regional Board meeting prior to approval by the Executive Officer."

PUBLIC WORKSHOP:

On March 12, 2004, a public workshop was conducted to provide a brief overview of the proposed WQMP, staff's comments on the plan, other comments received, and to seek comments from all interested parties. Staff's presentation was followed by testimony given by representatives for the County and the Cities under this MS4 Permit and the Construction Industry Coalition for Water Quality (CICWQ).

UPDATE:

On March 24, 2004, a revised Model WQMP was submitted by the Permittees along with a their response to comments on the December 2003 version of the WQMP. On March 25, 2004, staff notified interested parties by electronic mail of the availability of the document and provided a link to the revised WQMP and related documents. On April 6, 2004, comments were received from Natural Resources Defense Council (NRDC)/Defend the Bay. Staff provided comments on April 9, 2004. On April 12, 2004, staff met with representatives from CICWQ and representatives of the Permittees. At the conclusion of the meeting, CICWQ representatives indicated that they would provide written comments on the revised WQMP. A conference call with NRDC, Permittee representatives and staff is scheduled for April 19, 2004 to discuss their comments on the March 24, 2004 WQMP.

Comments on the March 24, 2004 WQMP have been posted on our website. Staff's comments consisted of a few items that required clarification or suggestions to improve clarity of the revised WQMP. Staff also forwarded this comment letter and the link to the permittee-submitted documents and comments to interested parties who have signed up to be notified by

email of developments in the SBC MS4 Permit. On April 14, 2004, the Permittees submitted a revised WQMP with corrections for typographical errors and other minor revisions. These comments, the revised WQMP, and other permittee submittals are posted on our website at http://www.swrcb.ca.gov/rwqcb8/html/sb-permittee.html .

RECOMMENDATION

Staff will request the Board to authorize the Executive Officer to approve the WQMP submitted on April 14, 2004. This document and the response to comments are posted on the website noted above.